

Component Identifiers (CID) and Module Identifier (MID)	
CID No.	Component
Caterpillar Monitoring System (MID No. 30)	
106	Fuel Level Sensor
110	Engine Coolant Temperature Sensor
177	Torque Converter Oil Temperature Sensor
243	Data Link
288	8 Volt Sensor Power Supply
271	Action Alarm
324	Action Lamp
600	Hydraulic Oil Temperature Sensor
601	Brake Air Pressure Sensor
819	Display Data Link
821	8 Volt Display Power Supply
830	Brake Oil Temperature Sensor
Engine Control (MID No. 36)	
001	Cylinder 1 Injector Solenoid
002	Cylinder 2 Injector Solenoid
003	Cylinder 3 Injector Solenoid
004	Cylinder 4 Injector Solenoid
005	Cylinder 5 Injector Solenoid
006	Cylinder 6 Injector Solenoid
007	Cylinder 7 Injector Solenoid
008	Cylinder 8 Injector Solenoid
009	Cylinder 9 Injector Solenoid
010	Cylinder 10 Injector Solenoid
011	Cylinder 11 Injector Solenoid
012	Cylinder 12 Injector Solenoid
042	Injection Actuation Control Valve
091	Throttle Switch
100	Oil Pressure Signal
119	Coolant Temperature Signal
164	Injection Actuation Pressure
168	Battery Voltage
174	Fuel Temperature Signal
175	Oil Temperature Signal
190	Primary Engine Speed Signal
248	CAT Data Link
253	Personality Module
254	Internal ECM
261	Timing Sensor Calibration
262	Analog Sensor Supply
263	Digital Sensor Supply
264	Decelerator Output
266	Crank W/V Inj Inputs
268	Programmable Parameters
273	Turbocharger Compressor Outlet Pressure
274	Atmospheric Pressure Signal
275	Turbocharger Compressor Inlet Pressure
277	Timing Calibration
291	Engine Fan Solenoid
342	Secondary Engine Speed
544	Engine Fan Speed Signal
545	Either Injection Relay
562	Communication with Caterpillar Monitoring System
599	Engine Fan Valve
Power Train Electronic Control (MID No. 113)	
070	Parking Brake Switch
075	Steering System Oil Temperature Switch
168	Electrical System
177	Transmission Oil Temperature Sensor
190	Engine Speed Sensor
248	CAT Data Link
254	Electronic Control Module
269	Sensor Power Supply
298	Service Brake Switch
299	Transmission Direction Lever Position Sensor
388	Autoshift Switch
468	Service Brake Pedal Position Sensor
573	Inching Pedal Position Sensor
618	Parking Brake Switch - Brake Backup Pole
621	Downshift Switch
622	Upshift Switch
653	Direction Switch
650	Harness Code
671	Transmission Output Speed 1 Sensor
672	Torque Converter Output Speed Sensor
673	Transmission Output Speed 2 Sensor
674	Transmission Intermediate Speed 1 Sensor
675	Transmission Intermediate Speed 2 Sensor
676	Left Steering Lever Position Sensor
677	Right Steering Lever Position Sensor
681	Parking Brake Solenoid
680	Left Steering Brake Solenoid
689	Right Steering Brake Solenoid
691	Reverse Clutch Solenoid Valve 1
692	Forward Clutch Solenoid Valve 2
693	Speed 3 Clutch Solenoid Valve 3
694	Speed 2 Clutch Solenoid Valve 4
695	Speed 1 Clutch Solenoid Valve 5
697	Priority Valve Solenoid
698	Left Steering Clutch Solenoid Valve
699	Right Steering Clutch Solenoid Valve
722	Secondary Brake Solenoid Valve

Failure Mode Identifiers (FMI) 1	
FMI No.	Description
0	Data valid but above normal operational range.
1	Data valid but below normal operational range.
2	Data erratic, intermittent, or incorrect.
3	Voltage above normal or shorted high.
4	Voltage below normal or open circuit.
5	Current above normal or open circuit.
6	Current below normal or grounded circuit.
7	Mechanical system not responding properly.
8	Abnormal frequency, pulse width, or period.
9	Abnormal update.
10	Abnormal rate of change.
11	Failure mode not identifiable.
12	Red device or component.
13	Out of calibration.

Wire Description				Wire Description				
Wire Number	Wire Color	Description	Wire Number	Wire Color	Description	Wire Number	Wire Color	Description
Power Circuits				Lighting Circuits (Cont'd)				
101	RD	Bat (+)	630	GY	Flood Lamp Rear (Atch)	630	GY	Flood Lamp Rear (Atch)
102	BU	Hd Lmp	633	BU	Attach Lighting Ckt	633	BU	Attach Lighting Ckt
105	BR	Key Sw	661	GN	Tachometer Lamp	661	GN	Tachometer Lamp
108	BU	Wiper	662	YL	Speedometer Lamp	662	YL	Speedometer Lamp
109	OR	Alt Output (+) Term	663	GY	Control Circuits	663	GY	Control Circuits
112	PU	Main Power Rly Output	709	OR	Sensor Power Supply	709	OR	Sensor Power Supply
113	OR	Opr Mon Panel B+ Salted	751	GN	XMSN Shift Sol No.1 Or 3	751	GN	XMSN Shift Sol No.1 Or 3
114	GN	Warning Horn (Forward)	752	YL	XMSN Shift Sol No.2 Or 4	752	YL	XMSN Shift Sol No.2 Or 4
116	BR	Rear Floods	754	BU	XMSN Shift Sol No.3 Or 1	754	BU	XMSN Shift Sol No.3 Or 1
124	GN	A/C	755	OR	XMSN Shift Sol No.4 Or 5	755	OR	XMSN Shift Sol No.4 Or 5
125	OR	Side Floods	779	WH	Coupler Engage Sol	779	WH	Coupler Engage Sol
130	GN	Seat Adjust	780	PU	Coupler Disengage Sol	780	PU	Coupler Disengage Sol
131	BR	Seat Heater	A700	GN	Digital Sensor Power (+5V)	A700	GN	Digital Sensor Power (+5V)
140	BU	Blower	A701	GY	Injector #1	A701	GY	Injector #1
150	OR	Engine	A702	PU	Injector #2	A702	PU	Injector #2
174	PK	Aux Ckt 1	A703	BR	Injector #3	A703	BR	Injector #3
176	OR	Concise	A704	GN	Injector #4	A704	GN	Injector #4
177	OR	Main Bkr	A705	BU	Injector #5	A705	BU	Injector #5
184	BU	Pitch Control Sw	A706	GY	Injector #6	A706	GY	Injector #6
186	WH	Power Outlet	A707	PU	Injector #7	A707	PU	Injector #7
197	GN	Aux Ckt 2	A708	BR	Injector #8	A708	BR	Injector #8
198	PK	Dump Valve	A709	OR	Injector #9	A709	OR	Injector #9
200	BK	Main Chassis	A710	GY	Injector #10	A710	GY	Injector #10
201	BK	Operator Monitor Return	A711	PU	Injector #11	A711	PU	Injector #11
202	BK	XMSN Ckt	A712	BR	Injector #12	A712	BR	Injector #12
203	BK	Chassis Diagnostic	A746	PK	Turbo Outlet Pressure	A746	PK	Turbo Outlet Pressure
207	BK	Chassis Diagnostic	A747	GY	Atmospheric Pressure	A747	GY	Atmospheric Pressure
229	BK	Bat (-)	A751	YL	After Cooler Temp	A751	YL	After Cooler Temp
270	BK	Ident Code 0	E707	GN	Display +V	E707	GN	Display +V
271	BK	Ident Code 1	E708	PK	Display Clock	E708	PK	Display Clock
272	BK	Ident Code 2	E735	PU	Smart Ems Tack/Sev Mtr/Odometer Select	E735	PU	Smart Ems Tack/Sev Mtr/Odometer Select
273	BK	Ident Code 3	E736	BU	ATA Data Link	E736	BU	ATA Data Link
274	BK	Ident Code 4	E794	YL	AT A Data Link +	E794	YL	AT A Data Link +
275	BK	Ident Code 5	E795	YL	Crankcase Press	E795	YL	Crankcase Press
276	BK	XMSN Crkident Code 0	E796	GN	Oil Press (Unfiltered)	E796	GN	Oil Press (Unfiltered)
277	BK	XMSN Ckt Ident Code 1	E797	WH	PWM #3 Return	E797	WH	PWM #3 Return
278	BK	XMSN Ckt Ident Code 2	E798	PK	PWM #1	E798	PK	PWM #1
279	BK	XMSN Ckt Ident Code 3	E799	BR	PWM #1 And #2 Return	E799	BR	PWM #1 And #2 Return
280	BK	XMSN Crkident Code 4	F700	BU	PWM #1 Out (3.5A)	F700	BU	PWM #1 Out (3.5A)
290	BK	Service	F701	BR	PWM #2 Out (3.5A)	F701	BR	PWM #2 Out (3.5A)
291	BK	Clear	F702	GN	Throttle	F702	GN	Throttle
A234	BK	11529 Shield Gnd	F703	GY	Lb Turbine Inlet Exh Temp	F703	GY	Lb Turbine Inlet Exh Temp
Basic Machine Circuits				Basic Machine Circuits				
301	BU	Starter No. 1 Sol	F704	OR	Rb Turbine Inlet Exh Temp	F704	OR	Rb Turbine Inlet Exh Temp
302	OR	Starter No. 1 Resistor To Diagnostic	F705	PK	Dout 6	F705	PK	Dout 6
304	WH	Starter Relay No. 1 Output	F706	PU	Dout 5	F706	PU	Dout 5
306	GN	Starter Relay Cool To Inlet Start SW Or Key SW	F707	WH	Either Current Level Relay	F707	WH	Either Current Level Relay
307	OR	Key SW To Inlet Start SW Or Sensor Module	F708	YL	Dout 3	F708	YL	Dout 3
308	YL	Main Power Relay Coil	F709	BU	Dout 2	F709	BU	Dout 2
310	PU	Start Aid SW To Start Aid Sol	F710	BK	Enter On Relay	F710	BK	Enter On Relay
311	WH	Start Aid Sol To Temp SW	F711	GN	CAN Lin +	F711	GN	CAN Lin +
312	PK	Starter No. 2 Sol To Resistor	F712	GY	CAN Lin -	F712	GY	CAN Lin -
313	GY	Starter No. 2 Resistor To Diagnostic	F713	OR	Left Turbo Inlet Press	F713	OR	Left Turbo Inlet Press
314	PU	Starter Relay No. 2 Output	F714	PK	Right Turbo Inlet Press	F714	PK	Right Turbo Inlet Press
321	BR	Bckp Alarm Lamp Travel Alarm	F715	PU	Shutoff (No)	F715	PU	Shutoff (No)
322	GY	Warning Horn (Forward)	F716	WH	Shutoff (No)	F716	WH	Shutoff (No)
334	BU	Start Aid Sol #2	F717	YL	SW 4	F717	YL	SW 4
337	WH	Prelube Pushbutton SW To Prelube Timer	F718	BU	SW 5	F718	BU	SW 5
403	GN	Abnormal (R) Term	F719	BR	SW 6/1	F719	BR	SW 6/1
405	GY	Op Mon Oil Press (Low Setting)	F720	GN	SW 8/3	F720	GN	SW 8/3
410	WH	Op Mon Fault Alarm	F721	GY	SW 8/4	F721	GY	SW 8/4
411	PK	Op Mon Master	F722	OR	SW 10/5	F722	OR	SW 10/5
412	BU	Op Mon Cool Flow	F723	PK	TDC Probe +	F723	PK	TDC Probe +
419	YL	Op Mon Parking Brake	F724	PU	TDC Probe -	F724	PU	TDC Probe -
420	OR	Op Mon Fuel Filter/Low Accum Press	F725	WH	Fuel Press	F725	WH	Fuel Press
426	BR	Op Mon Power Train Oil Filter	F726	YL	Injector Common 1 & 3	F726	YL	Injector Common 1 & 3
441	OR	Eng Coolant Temp Gauge	F727	BU	Injector Common 2 & 4	F727	BU	Injector Common 2 & 4
442	GY	Hyd System Temp Gauge	F728	BR	Injector Common 5 & 7	F728	BR	Injector Common 5 & 7
443	YL	Power Train Temp Gauge	F729	GN	Injector Common 6 & 8	F729	GN	Injector Common 6 & 8
447	PK	Fuel Level Gauge	F730	GY	Injector Common 9 & 11	F730	GY	Injector Common 9 & 11
450	YL	TachSensor(H)	F731	OR	Injector Common 10 & 12	F731	OR	Injector Common 10 & 12
499	GY	Op Mon Inletment Oil Filter	F732	PK	Backup Camshaft Sw(Tng/Marine)	F732	PK	Backup Camshaft Sw(Tng/Marine)
A447	PK	Prelube Press. SW To Prelube Timer	F737	YL	Analog Sensor Input 6	F737	YL	Analog Sensor Input 6
C413	YL	Display Data	F780	PK	Parking Brake SW	F780	PK	Parking Brake SW
C414	BU	Display Load	F781	BR	Downshift SW (N.O.)	F781	BR	Downshift SW (N.O.)
Accessory Circuits				Accessory Circuits				
500	BR	Wiper - Front (Park)	F782	OR	Reverse SW (N.O.)	F782	OR	Reverse SW (N.O.)
501	GN	Wiper - Front (Low)	F783	GN	Upshift SW (N.C.)	F783	GN	Upshift SW (N.C.)
502	OR	Wiper - Front (Hi)	F784	YL	Downshift SW (N.C.)	F784	YL	Downshift SW (N.C.)
503	BR	Wiper - Rear (Park)	F785	WH	Upshift SW (N.O.)	F785	WH	Upshift SW (N.O.)
504	YL	Wiper - Rear (Low)	F786	GY	Reverse SW (N.C.)	F786	GY	Reverse SW (N.C.)
505	BU	Wiper - Rear (Hi)	F788	PU	Left Steer Clutch	F788	PU	Left Steer Clutch
506	PU	Washer - Front	F789	YL	Right Steer Clutch	F789	YL	Right Steer Clutch
507	WH	Washer - Rear	F790	BR	Service Brake Pedal	F790	BR	Service Brake Pedal
508	PU	Radio Speaker - Left	F791	BU	Right Brake Solenoid	F791	BU	Right Brake Solenoid
509	WH	Radio Speaker - Right	F792	WH	Left Brake Solenoid	F792	WH	Left Brake Solenoid
511	BR	Radio Speaker - Right	F797	BU	Display Sensor +V	F797	BU	Display Sensor +V
512	GN	Radio Speaker - Right (Common)	G730	PK	EPTC # - Park Brake Sol	G730	PK	EPTC # - Park Brake Sol
513	OR	A/C Compressor/Refrigerant Pressure SW	G731	GY	EPTC # - Secondary Service Brake Sol	G731	GY	EPTC # - Secondary Service Brake Sol
515	GY	Blower Motor (Hi)	828	WH	Left Star Push Sensor	828	WH	Left Star Push Sensor
516	GN	Blower Motor (Medium)	830	OR	Right Star Push Sensor	830	OR	Right Star Push Sensor
517	BU	Blower Motor (Low)	851	WH	Speed And Direction Sensor	851	WH	Speed And Direction Sensor
521	YL	A/C SW To Refrigerant SW	852	BR	Start Mod Right (+) PostCAT Data Link (-)	852	BR	Start Mod Right (+) PostCAT Data Link (-)
522	WH	A/C Clutch To Throttle SW	893	GN	Start Mod Right (+) PostCAT Data Link (+)	893	GN	Start Mod Right (+) PostCAT Data Link (+)
523	BR	Wiper - Left (Park)	F942	BU	Air Pnt Heat	F942	BU	Air Pnt Heat
524	BU	Wiper - Left (Low)	F943	YL	Inching Pedal	F943	YL	Inching Pedal
525	GY	Wiper - Left (Hi)	F946	PU	LED Driver 1	F946	PU	LED Driver 1
527	GN	Wiper - Right (Low)	F847	YL	ECB SW IP1	F847	YL	ECB SW IP1
528	PK	Wiper - Right (Hi)	F848	OR	ECB SW IP2	F848	OR	ECB SW IP2
529	WH	Washer Left	F849	WH	ECB SW IP3	F849	WH	ECB SW IP3
530	OR	Washer Right	F850	PK	ECB SW IP4	F850	PK	ECB SW IP4
553	YL	Wiper Sol To Trigger SW - Dual Tr	G848	GN	LED Driver 2	G848	GN	LED Driver 2
554	PK	Monometer To Single Trl Sol - Dual Trl	800	PU	XMSN Shift Sol No.4	800	PU	XMSN Shift Sol No.4
567	WH	A/C SW Jumper	873	BR	CST AutoShift - Auto/Manual SW 2	873	BR	CST AutoShift - Auto/Manual SW 2
592	BU	DC/DC Converter Power Output	975	WH				

